

COMBATING TERRORISM TECHNOLOGY SUPPORT OFFICE

**BROAD AGENCY ANNOUNCEMENT (BAA)
07-Q-4057**

Due Date for Receipt of Phase 1 Quad Charts:

No Later Than April 6, 2007

BX - Blast Effects and Mitigation

CD - Concept Development

ED - Explosives Detection

EL - Explosive Ordnance Disposal/Low-Intensity Conflict

IDD - Improvised Device Defeat

IWS - Irregular Warfare Support

TOS - Tactical Operations Support

VIP - VIP Protection

**All submissions are due by 1600; 4:00 p.m.
Eastern Time (ET) on the above date**

TABLE OF CONTENTS

1. INTRODUCTION.....	5
1.1. APPROACH.....	5
1.2. HBCU/MI AND SMALL BUSINESS SET ASIDE.....	5
1.3. LIMITATION OF FUNDS.....	5
1.4. TECHNICAL EVALUATION SUPPORT.....	5
1.5. BAA PACKAGE DOWNLOAD.....	6
1.6. BAA CONTRACTUAL AND TECHNICAL QUESTIONS.....	6
1.7. BIDS WEBSITE HELP REQUESTS.....	6
1.8. BIDS FREQUENTLY ASKED QUESTIONS (FAQS).....	6
2. GENERAL INFORMATION.....	7
2.1. ELIGIBILITY.....	7
2.2. PROCUREMENT INTEGRITY, STANDARDS OF CONDUCT, ETHICAL CONSIDERATIONS.....	7
2.3. DEFINITIONS.....	7
2.3.1. Small Business Concern (FAR 19.001).....	7
2.3.2. North American Industry Classification System.....	7
2.4. RESTRICTIVE MARKINGS ON PROPOSALS.....	7
2.5. SUBMISSION HANDLING/RIGHTS IN TECHNICAL DATA AND COMPUTER SOFTWARE/PATENT RIGHTS.....	7
2.5.1. Procurement Integrity.....	7
2.5.2. Submission Information and FOIA.....	7
2.5.3. Rights in Technical Data and Computer Software.....	7
2.5.4. Patents.....	8
2.6. PRODUCT AND DELIVERABLE REQUIREMENTS.....	8
2.7. DISTRIBUTION/RELEASE LIMITATIONS.....	8
2.8. SUBCONTRACTING.....	8
2.9. ANIMAL OR HUMAN TESTING COMPLIANCE.....	9
2.9.1. Animal Testing.....	9
2.9.2. Human Subjects Testing.....	9
3. PROPOSAL PREPARATION.....	10
3.1. BAA INFORMATION DELIVERY SYSTEM (BIDS).....	10
3.1.1. Submitter Registration.....	10
3.1.2. User Accounts and Password Resets.....	10
3.1.3. Registration and Account Help.....	10
3.1.4. Header and Cover Page Information.....	10
3.1.5. Document Identifier.....	10
3.1.5.1. Constructing Document Identifiers.....	10
3.1.5.2. Creating Submitter Internal Tracking (SIT) Numbers.....	11
3.2. BIDS SECURITY AND ACCESS CONTROL.....	11
3.3. SUBMISSION CHANGES.....	11
3.4. SPECIAL HANDLING PROCEDURES FOR CLASSIFIED INFORMATION.....	11
3.5. PHASE 1 QUAD CHART SUBMISSIONS.....	12
3.5.1. Phase 1 Due Date and Time.....	12
3.5.2. Electronic File Format.....	12
3.5.3. Quad Chart Content.....	12
3.5.3.1. Header Information.....	12
3.5.3.2. Top Left Quadrant, Graphical Depiction.....	12
3.5.3.3. Top Right Quadrant, Operational and Performance Capabilities.....	12
3.5.3.4. Bottom Left Quadrant, Technical Approach.....	13
3.5.3.5. Bottom Right Quadrant, Cost and Schedule.....	13
3.5.4. Phase 1 Notification to Offeror.....	13
3.5.5. Phase 1 Status and Inquiries.....	13

3.6. PHASE 2 WHITE PAPER SUBMISSIONS.	13
3.6.1. Phase 2 Due Date and Time.	13
3.6.2. Electronic File Format.	14
3.6.3. Phase 2 Document Upload.	14
3.6.4. White Paper Content.	14
3.6.4.1. Technical Approach.	14
3.6.4.2. Tasks and Deliverables.	14
3.6.4.3. Schedule.	14
3.6.4.4. Cost.	14
3.6.4.5. Intellectual Property, Technical Data, and Software.	15
3.6.4.5.1. Patents and Patent Applications.	15
3.6.4.5.2. Rights in Technical Data and Software.	15
3.6.4.6. Transition from Prototype to Production.	15
3.6.4.7. Organizational Capability Statement.	15
3.6.5. Phase 2 Notifications to Offeror.	15
3.6.6. Phase 2 Status and Inquiries.	15
3.7. PHASE 3 FULL PROPOSAL SUBMISSIONS.	15
3.7.1. Phase 3 Due Date and Time.	16
3.7.2. Electronic File Format.	16
3.7.3. Phase 3 Document Upload.	16
3.7.4. Full Proposal Components.	16
3.7.5. Technical Proposal Content.	16
3.7.5.1. Cover Page.	16
3.7.5.2. Abstract.	17
3.7.5.3. Executive Summary.	17
3.7.5.4. Technical Approach.	17
3.7.5.5. Project Plan.	17
3.7.5.5.1. Phases.	17
3.7.5.5.2. Tasks within a Phase.	17
3.7.5.5.3. Products and Deliverables.	17
3.7.5.6. Master Schedule.	17
3.7.5.7. Government Furnished Equipment.	17
3.7.5.8. Project Risks and Mitigation.	18
3.7.5.9. Organizational Capability Statement.	18
3.7.5.10. Organizational Resources.	18
3.7.5.11. Intellectual Property, Technical Data and Software.	18
3.7.5.11.1. Patents and Patent Applications.	18
3.7.5.11.2. Rights in Technical Data.	18
3.7.5.12. Transition from Prototype to Production.	18
3.7.5.12.1. Transition Strategy.	18
3.7.5.12.2. Transition Approach.	18
3.7.5.12.3. Test and Evaluation.	19
3.7.5.12.4. Operational Support.	19
3.7.5.13. Human Subjects and Animal Testing.	19
3.7.5.14. Environmental Impact.	19
3.7.5.15. Classification and Security.	19
3.7.5.16. Subcontracting Plan.	19
3.7.6. Cost Proposal.	19
3.7.6.1. Cost Summary.	19
3.7.6.1.1. Other Funding Sources.	20
3.7.6.2. Detailed Cost Estimate.	20
3.7.6.2.1. Direct Labor.	20
3.7.6.2.2. Indirect Costs.	20
3.7.6.2.3. Other Costs.	20
3.7.6.2.4. Materials.	20
3.7.6.2.5. Government Furnished Equipment.	20

3.7.6.2.6. Fee.....	20
3.7.6.2.7. Competitive Methods.....	20
3.7.6.2.8. Established Catalog or Market Prices/Prices Set By Law or Regulation.	21
3.7.6.2.9. Noncompetitive Methods.....	21
3.7.6.2.10. Royalties.....	21
3.7.6.2.11. Facilities Capital Cost of Money.....	21
3.7.7. Phase 3 Notifications to Offerors.....	21
3.7.8. Phase 3 Status and Inquiries.....	21
4. PROPOSAL EVALUATION.....	22
4.1. OBJECTIVE.....	22
4.2. EVALUATION CRITERIA.....	22
4.2.1. Basic Requirement.....	22
4.2.2. Cost.....	22
4.2.3. Schedule.....	22
4.2.4. Technical Performance.....	22
4.2.5. Contractor Past Performance.....	22
5. TECHNOLOGY DEVELOPMENT REQUIREMENTS AND OBJECTIVES.....	23
5.1. BLAST EFFECTS AND MITIGATION (BX).....	23
2289 Blast Waves in an Urban Canyon Environment.....	23
5.2. CONCEPT DEVELOPMENT (CD).....	23
2304 Alternative Methods of Analysis.....	23
5.3. EXPLOSIVES DETECTION (ED).....	23
2299 Tandem Specialized Search Dogs.....	23
2314 Explosives Chemical Signature Database.....	24
5.4. EXPLOSIVE ORDNANCE DISPOSAL/LOW-INTENSITY CONFLICT – EOD/LIC (EL).....	24
2261 Tankless Exothermic Cutting Torch.....	24
5.5. IMPROVISED EXPLOSIVE DEVICE DEFEAT (IDD).....	25
2244 Remote Control Package for Commercial Off-The-Shelf (COTS) Utility Vehicle.....	25
2249 Improved Manipulator End Effectors for Remotely Controlled Vehicles (RCVs).....	25
2271 Low Cost Unmanned Aerial Recon System.....	25
000-ID Unspecified Requirement - IDD.....	26
5.6. IRREGULAR WARFARE SUPPORT (IWS) PROGRAM.....	26
000-IWS Unspecified Requirement - IWS.....	26
5.7. TACTICAL OPERATIONS SUPPORT (TOS).....	27
2142 Standoff Vehicle Stopper.....	27
2228 High Intensity Tactical Vehicle Infrared (HITIR) and White Headlight System.....	28
2229 IR Illuminators with Motion Sensors (Remote and Network Capable).....	28
5.8. VIP PROTECTION (VIP).....	29
2293 Portable Man-Portable Air Defense System (MANPADS) Detection System.....	29
2296 Man-Portable Surveillance System.....	30
2298 Ruggedized VIP Security Kit.....	30
ATTACHMENT A – ACRONYMS AND ABBREVIATIONS.....	31

1. INTRODUCTION.

This is a Combating Terrorism Technology Support Office (CTTSO) Broad Agency Announcement (BAA) issued under the provisions of paragraph 6.102(d)(2) of the Federal Acquisition Regulation (FAR) to provide for the competitive selection of research proposals. Contracts based on responses to this BAA are considered to be the result of full and open competition and in full compliance with the provisions of Public Law (PL) 98-369, "The Competition in Contracting Act of 1984." Awards for submissions under this BAA are planned in Fiscal Year (FY) 2008; however, some awards could be made in late FY 2007. Funds may not be available for all requirements under this BAA. No contract awards will be made until appropriated funds are available from which payment for contract purposes can be made.

1.1. Approach.

A three-phased proposal selection process will be used for this solicitation to minimize cost and effort of prospective offerors. Phase 1 will consist of the solicitation, receipt, and evaluation of a one-page Quad Chart. Phase 2 will consist of the solicitation, receipt, and evaluation of a White Paper (not to exceed 12 pages) and applies to only those submissions that have been accepted in Phase 1. Phase 3 will consist of the solicitation, receipt, and evaluation of a full proposal (not to exceed 50 pages) and applies to only those submissions that have been accepted in Phase 2. Based on the priority of critical requirements and the availability of funding, Phase 1 submissions can be selected for Phase 3 submittal of a full proposal without a Phase 2 submission.

1.2. HBCU/MI and Small Business Set Aside.

The Government encourages nonprofit organizations, educational institutions, small businesses, small disadvantaged business (SDB) concerns, Historically Black Colleges and Universities (HBCU), Minority Institutions (MI) (HBCU/MIs), women-owned businesses, and Historically Underutilized Business (HUB) zone enterprises as well as large businesses and Government laboratories to submit research proposals for consideration and/or to join others in submitting proposals; however, no portion of the BAA will be set-aside for these special entities because of the impracticality of reserving discrete or severable areas of research and development in any specific requirement area. A goal of 2.5 percent of total dollars awarded will be considered for HBCU/MI and a goal of 2.5 percent of total dollars awarded will be considered for small businesses for a total goal of 5 percent. The final determination will be made based on the individual technical merits of the proposal and budget constraints within the mission priorities. To ensure full consideration in these programs, registration in the [BAA Information Delivery System \(BIDS\)](#), described later in this document, requires the appropriate business type selection as well as accurate up-to-date information.

1.3. Limitation of Funds.

The Government intends to incrementally fund contracts awarded from this BAA as provided by FAR 52.232-22, "Limitation of Funds." Most contracts awarded are anticipated to be 6 to 24 months in duration. To facilitate incremental funding, submissions shall include the cost and schedule by a task-phased structure with clear exit criteria, and shall be inclusive of all work to complete the effort including any options. It is anticipated that the entire effort will be negotiated with the initial contract award.

1.4. Technical Evaluation Support.

It is the intent of this office to use contractor support personnel in the review, evaluation, and administration of all submissions for this BAA. All individuals in this category that will have access to any proprietary data shall certify that they will not disclose any information pertaining to this solicitation including any submission, the identity of any submitters, or any other information relative to this BAA; and shall certify that they have no financial interest in any submissions evaluated. Submissions and information received in response to this BAA constitutes permission to disclose that information to certified evaluators under these conditions.

1.5. BAA Package Download.

This BAA Package can be downloaded electronically in its entirety from www.bids.tswg.gov under [Download BAAs](#). Registration is not required to download the BAA package; however, a BIDS registration is required to upload a response to the BAA.

1.6. BAA Contractual and Technical Questions.

All contractual and technical questions regarding this BAA including the published requirements and instructions must be directed to the Contracting Officer at 07-Q-4057@tswg.gov. The program and technical staff will not acknowledge, forward, or respond to any inquiries received in any other manner concerning the BAA. Contractual questions and answers will be posted periodically under [Frequently Asked Questions \(FAQs\)](#) on the [BIDS website](#).

1.7. BIDS Website Help Requests.

For technical help using BIDS, submit questions to the BIDS administrators at bidshelp@tswg.gov or by using the [Help Request](#) link located on the BIDS Homepage. Include a valid e-mail address, your BIDS User Name, and a detailed description of the question or concern in the comments block. The BIDS website provides other valuable resources under [Online Help](#), [Web-based Training](#), and [Doing Business with the Government](#).

1.8. BIDS Frequently Asked Questions (FAQs).

FAQs are a list of questions and associated responses for general and specific topics including those forwarded to the Contracting Officer for a BAA. Offerors are encouraged to periodically review [FAQs](#) located at www.bids.tswg.gov.

NOTE: *Persons submitting proposals are advised that only the Contracting Officer can obligate the Government to any agreement involving expenditure of Government funds.*

2. GENERAL INFORMATION.

This section includes information applicable to all contracts awarded under this BAA.

2.1. Eligibility.

To be eligible for contract award, a responsible offeror must meet certain minimum standards pertaining to financial solvency and resources, ability to comply with the performance schedule, prior record of satisfactory performance, integrity, organization, experience, operational controls, technical skills, facilities, and equipment. See FAR 9.104. Additionally, all offerors must be registered in the Central Contractor Registration (CCR) database, website www.ccr.gov, as indicated in FAR 4.1100. Contractors must complete Online Representation and Certifications (ORCA) at <https://orca.bpn.gov>. These and other helpful links are also provided on the [BIDS Homepage](#).

2.2. Procurement Integrity, Standards of Conduct, Ethical Considerations.

Certain post-employment restrictions on former federal officers and employees exist including special Government employees (Section 207 of Title 18, United States Code (U.S.C.)). If a prospective offeror believes that a conflict of interest exists, the offeror should make this known to the issuing office's Contracting Officer for resolution before time and effort are expended in preparing a proposal.

2.3. Definitions.

2.3.1. Small Business Concern (FAR 19.001).

A concern that is independently owned and operated; is not dominant in the field of operation in which it is bidding on Government contracts; and meets the size standards in FAR 19.102.

2.3.2. North American Industry Classification System.

Establishments that specialize in performing Professional, Scientific and Technical Activities for others are coded 541710 under the North American Industry Classification System (NAICS). The small business size standard for Classification 541710 is 500 employees.

2.4. Restrictive Markings on Proposals.

All proposals should clearly indicate content disclosure limitations. Submissions can be marked as "Proprietary" or words to that effect; however, markings such as "Company Confidential" or other phrases that could be confused with national security classifications shall not be used. All paragraphs that contain proprietary information must be clearly marked.

2.5. Submission Handling/Rights in Technical Data and Computer Software/Patent Rights.

2.5.1. Procurement Integrity.

The Government intends to comply with FAR 3.104 in its treatment of information submitted in response to this BAA solicitation and marked with the individual or company's legend.

2.5.2. Submission Information and FOIA.

Records or data bearing a restrictive legend can be included in the proposal. However, the offeror is cautioned that portions of the proposal are subject to release under the terms of the Freedom of Information Act (FOIA), 5 U.S.C. 552, as amended. In accordance with FOIA regulations, the offeror will be afforded the opportunity to comment on, or object to, the release of proposal information.

2.5.3. Rights in Technical Data and Computer Software.

Rights in technical data, and computer software and software documentation provided in the proposal are treated in accordance with the DFARS 252.227-7016, "Rights in Bid and Proposal Information." Rights in technical data, and computer software and computer software documentation in the resultant contract shall be in accordance with DFARS 252.227-7013 (regarding technical data) and DFARS 252.227-7014 (regarding computer software and software

documentation). Both clauses (DFARS 252.227-7013 and 252.227-7014) will be included in any non-commercial contract exceeding the simplified acquisition threshold. Table 1 contains these and related clauses to be included in the contract.

Table 1. Contract Clauses	
DFARS	Title
252.227-7013	Rights in Technical Data – Non-commercial Items
252.227-7014	Rights in Non-commercial Computer Software and Non-commercial Computer Software Documentation
252.227-7016	Rights in Bid and Proposal Information
252.227-7017	Identification and Assertion of Use, Release, or Disclosure Restrictions (FILL-IN)
252.227-7019	Validation of Asserted Restrictions - Computer Software
252.227-7025	Limitations on the Use or Disclosure of Government Furnished Information Marked with Restrictive Legends
252.227-7027	Deferred Ordering of Technical Data or Computer Software
252.227-7028	Technical Data or Computer Software Previously Delivered to the Government
252.227-7030	Technical Data - Withholding of Payment
252.227-7037	Validation of Restrictive Markings on Technical Data

2.5.4. Patents.

Patents in existence and patent applications pending at the time of the proposal, that relate to the proposed effort, shall be identified in the White Paper and Full Proposal in accordance with the clauses above.

2.6. Product and Deliverable Requirements.

All proposal phases shall include the costs for products and data deliverable requirements. Minimum report requirements include Monthly Status Reports (MSRs) and a Final Technical Report even if the research is to be continued under a follow-on contract or contract option. MSRs document program, technical, and financial status. The Final Technical Report summarizes the project and associated tasks at the conclusion of each contract. Include MSRs, the Final Technical Report, and any products and deliverables specific to the performance of the proposed effort. Additional products and deliverables could include prototype hardware, software, or systems; test plans; test and technical reports; technical data; specifications; requirements documents; computer programs or software; user manuals; drawings; or other products and data. The number, types, and preparation instructions for products and deliverables will be specified in the contract.

2.7. Distribution/Release Limitations.

The offeror should be aware that all resulting contracts or other awards will contain release limitations for all data resulting from the effort in accordance with DFARS 252.204-7000. This includes products, data, information, and services to be performed. The contractor shall protect all data and information from disclosure, and shall not release any data or information by any method of dissemination without prior Government approval.

2.8. Subcontracting.

Pursuant to Section 8(d) of the Small Business Act (15 U.S.C. 637(d)), it is the policy of the Government to enable small business and small disadvantaged business concerns to be considered fairly as subcontractors to contractors performing work or rendering services as prime contractors or subcontractors under Government contracts, and to assure that prime contractors and subcontractors carry out this policy.

2.9. Animal or Human Testing Compliance.

The contractor shall comply with all laws and regulations governing the use of animals or human subjects in research projects.

2.9.1. Animal Testing.

Any contract resulting from this BAA that potentially involves the testing of animals shall include the following language:

Any contractor performing research on warm blooded vertebrate animals shall comply with the Laboratory Animal Welfare Act of 1966, as amended, 7 U.S.C. §§ 2131 - 2156, and the regulations promulgated thereunder by the Secretary of Agriculture in 9 C.F.R. Parts 1 through 4, pertaining to the care, handling, and treatment of vertebrate animals held or used for research, teaching, or other activities supported by Federal contract awards. In addition, the contractor shall comply with the provisions of Department of Defense Directive 3216.1, as implemented by SECNAVINST 3900.38B, and DFARS 252.235-7002, "Animal Welfare," which is incorporated into this contract.

2.9.2. Human Subjects Testing.

Any contract resulting from this BAA that potentially involves the use of Human Subjects in the research or study shall include the following language:

The contractor shall comply with all regulations promulgated by the Office of the Secretary of Defense in 32 C.F.R. Part 219, pertaining to the protection of human subjects. In addition, the contractor shall comply with the provisions of Department of Defense Directive 3216.2. If human subjects are to be used at any time during the project, the contractor shall have a Federal assurance that is acceptable to the CTTSO before involving human subjects. Additionally, the protocol shall be approved by a Federally-assured Institutional Review Board (IRB) office named in the institution's assurance. The contractor shall prepare these documents and shall ensure that they are on file with CTTSO prior to the start of research involving human subjects. Collaborators with the contractor, to include IRBs, shall also comply with regulations to protect human subjects for both classified and unclassified research. The contractor shall report all changes in the protocol or consent form to the CTTSO Contracting Officer's Representative (COR) as they occur. Release of initial and follow-up funding will be contingent upon initial and continuing reviews, and to other IRB and component requirements.

3. PROPOSAL PREPARATION.

This section provides information and instructions for the preparation and submission of all proposals under this BAA. All submissions must meet these requirements including format, content, and structure, and must include all specified information to avoid disqualification, submission rejection, or delays in evaluation.

3.1. BAA Information Delivery System (BIDS).

BIDS at www.bids.tswg.gov is used to provide public access to the BAA package, to collect all unclassified submissions, and to collect placeholder records for all classified submissions. BIDS also provides submission progress tracking, evaluation comment collection, and results notification back to the submitter.

3.1.1. Submitter Registration.

A BIDS submitter registration is required to respond to this BAA. Existing BIDS accounts are acceptable for a new BAA *if the company contact information is the same* or is corrected. Registrations should reflect the offeror's contracting or business authority. The User Name is created by the offeror, must be unique, and is used for BIDS login and submission tracking. Registration acceptance for submitters is automatic, but takes several seconds to be recognized by BIDS. A success e-mail will be sent to indicate that the User Name and account are accepted. BIDS is e-mail dependent and uses the Registration e-mail as the single point of contact for all notifications associated with the BAA. This e-mail address should be monitored frequently during the BAA process for the notices. E-mail addresses included in the submissions or any other data field in BIDS will not be used for contact and notification purposes.

3.1.2. User Accounts and Password Resets.

Registration account information such as the point of contact (POC), e-mail, and password can be updated after login. The [Forgot My Password](#) link on the BIDS Homepage allows registered users with a valid e-mail address to automatically reset a password. The system will verify the account User Name and e-mail to send a new password to that e-mail.

3.1.3. Registration and Account Help.

BIDS Help requests can be e-mailed to BIDS administrators at bidshelp@tswg.gov or submitted via the [Help Request](#) link located on the [BIDS Homepage](#).

3.1.4. Header and Cover Page Information.

All Quad Charts must include the BAA Announcement Number, the Document Identifier, and Proposal Title in the header. Cover pages for all White Papers and Full Proposals must also contain this information along with mandatory contractual information. A Quad Chart template and sample as well as the cover page template are provided in BIDS under [Downloads, Reference Materials, Document Format](#). A cover page is not required for Quad Charts.

3.1.5. Document Identifier.

The offeror shall include the document identifier in the header of each submission. Document identifiers must match the BIDS submission record and should be constructed *before* upload to BIDS.

3.1.5.1. Constructing Document Identifiers.

Document identifiers, auto-generated in part by BIDS, are based on Subgroup or Mission Area, the requirement number, the user name, and a Submitter Internal Tracking (SIT) number. The underlined portion of the sample shown in Table 2 depicts the segment automatically formed by BIDS.

Table 2. Sample Document Identifier and Components Definition

CB-1112-ABCCORP-10703JT-QC	
From Sample	Document Identifier Component
CB	subgroup or mission area designation - from BAA
1112	requirement number - from BAA
ABCCORP	user name - from BIDS registration
10703JT-QC	SIT number - any alphanumeric combination (with no special characters or spaces) created by the submitter for (submitter) tracking purposes along with the document type suffix

3.1.5.2. Creating Submitter Internal Tracking (SIT) Numbers.

SIT numbers are unique identifiers created by submitters and entered in the submission record during the upload process. SIT numbers can be any alphanumeric combination (no special characters or spaces) chosen by the submitter plus a suffix indicating the document type. BIDS enforces unique SIT numbers and will not allow the submission record to be saved if the SIT number has already been used. Table 3 provides sample SIT numbering formats for each document type.

Table 3. Sample SIT Numbers for an Accepted Submission

Document Type	Auto-generated by BIDS	SIT#
Quad Charts	CB-1112-ABCORP	10703JT-QC
White Papers	CB-1112-ABCORP	10703JT-WP
Full Proposals	CB-1112-ABCORP	10703JT-FP

Offerors uploading more than one submission to the same requirement shall create unique identifiers by adding a numbered sequence to the document type suffix. Table 4 offers sample SIT number formats for multiple submissions to the same requirement.

Table 4. Sample SIT Numbers for Multiple Submissions to the Same Requirement

Submission #	Auto-generated by BIDS	SIT# Sample 1	SIT# Sample 2*
Submission 1	CB-1112-ABCORP	10703JT-QC1	QC1
Submission 2	CB-1112-ABCORP	10703JT-QC2	QC2
Submission 3	CB-1112-ABCORP	10703JT-QC3	QC3
* NOTE: If the submitter does not require an internal tracking number, use the document type designation.			

3.2. BIDS Security and Access Control.

All data uploaded to BIDS is secure from public view and download. All submissions will be considered proprietary/source selection sensitive and protected accordingly. The documents can only be reviewed by the registrant, and authorized Government and contractor representatives with no conflict of interest.

3.3. Submission Changes.

Changes to uploaded responses will be permitted up to the closing date and time. If a modification is required, update the original file in the source application and save. Convert to an acceptable format if applicable. In BIDS, open the submission record, click **Edit Submission**, and update the record information. Use **Browse** to select the revised document. Select the checkbox to remove the old attachment. Click **Submit for Processing** to save the changes. Documents cannot be edited online through the BIDS web interface. File names must contain no spaces or special characters. Ensure the file size does not exceed the size limit. To completely remove a submission from consideration, select **Delete Submission**. Changes after the requirement due date and time are not permitted.

3.4. Special Handling Procedures for Classified Information.

If a submission contains classified information, the offeror must first create a placeholder record in BIDS with an unclassified cover page attachment. Identify in the comments section of the submission record

that the submission cannot be uploaded due to classification. The BIDS tracking number (Document Identifier) must be clearly identified on the mailed document(s). Classified responses (up to SECRET) must be appropriately and clearly marked (including all paragraphs and pages containing the subject data), packaged, and shipped in accordance with classified material handling procedures and security regulations pertaining to the level of classification for that document.

To obtain mailing instructions for classified submissions, e-mail: BAAscurity@tswg.gov.

Classified submissions must be received by the applicable due date and time. Classification does not in any way eliminate the offeror's requirement to comply with all BAA instructions.

3.5. Phase 1 Quad Chart Submissions.

Offerors shall prepare and upload a one-page (8 ½ by 11 inches page) Quad Chart in response to Phase 1 of this BAA. Use font sizes of 10 point or greater. If more than one page is submitted, only the first page will be evaluated. Quad Charts do not require a Cover Page.

3.5.1. Phase 1 Due Date and Time.

All unclassified Quad Charts must be received electronically through BIDS no later than 1600 (4:00 p.m.) Eastern Time (ET) on April 6, 2007. Likewise, classified submissions must be received by the same due date and time. Refer to the "Special Handling Procedures for Classified Information" in this document for instructions on classified submissions. BIDS does not allow proposals to be uploaded or classified placeholders to be created after the closing date and time. Any proposal, regardless of classification, submitted by any other means, or that is late will not be considered by the Government. Avoid the last minute rush; submit early.

3.5.2. Electronic File Format.

The Quad Chart shall be submitted in Microsoft Office (Word or PowerPoint), or Adobe Acrobat (PDF – portable document format). ZIP files and other application formats are not acceptable. The document must be print-capable, without password, and no larger than 500 kB. Filenames must contain the appropriate filename extension (.doc, .ppt, or .pdf). Filenames cannot contain spaces or special characters. Apple/Macintosh users must ensure the entire filename and path are free of spaces and special characters. Submissions that cannot be opened, viewed, or printed will not be considered.

3.5.3. Quad Chart Content.

A Quad chart conveys the essence of the proposed solution for a single requirement. When preparing a submission, the offeror shall ensure that the specific criteria of the requirement are addressed, the solution is clear, and can be accomplished with the proposed technology, cost, and schedule. The Quad Chart includes a document header and four quadrants. The Quad Chart format and sample are provided at the BIDS website under [Downloads, Reference Materials, Document Format](#).

3.5.3.1. Header Information.

Header information shall include the BAA Announcement number, the Document Identifier, and the Proposal Title. The date and company name should be included along with the appropriate document markings.

3.5.3.2. Top Left Quadrant, Graphical Depiction.

The top left quadrant is a graphical depiction, photograph, or artist's concept of the proposed solution or prototype. Include labels or brief descriptive text as needed for clarification. Ideally, this will convey the prototype concept, use, capability, and any relevant size or weight relationships based on the published requirement.

3.5.3.3. Top Right Quadrant, Operational and Performance Capabilities.

The top right quadrant contains the operational and performance capabilities summary.

Describe any basic, new, or enhanced capabilities the system will provide to meet the published requirement. In bullet form, list key aspects of performance, capability, operational use, relevant software or hardware specifications, and planned interface and/or compatibility.

3.5.3.4. Bottom Left Quadrant, Technical Approach.

The bottom left quadrant contains the proposed technical approach. Specifically, describe the technology involved, how it will be used to solve the problem, actions done to date, and any related on-going efforts. Briefly describe the tasks to be performed for each phase. A bullet list is acceptable.

3.5.3.5. Bottom Right Quadrant, Cost and Schedule.

The bottom right quadrant contains the Rough Order of Magnitude (ROM) and Schedule, Products and Deliverables, and Corporate Contact Information. ROM and Schedule shall be proposed by phase and include the cost, period of performance (POP), and exit criteria for each phase. A total cost and POP that combines all phases shall also be included. Products and Deliverables shall include, by phase, a list of all prototype hardware and software along with the required data as described in "Product and Deliverable Requirements" in section 2 of this document. Corporate Contact Information shall include the submitter's company name, point of contact, phone number, and e-mail address. Include any significant teaming partner (contact information) relevant to the evaluation. (Note that the contact information in the BIDS registration is used for all notices and contact purposes.)

3.5.4. Phase 1 Notification to Offeror.

The Government will notify the offeror when a submission has been accepted or rejected. Notification of acceptance with a request to submit the next phase document will be e-mailed to the offeror's contracting authority as entered in the BIDS registration and will indicate the next submission type, clarification requests, and due date and time. Likewise, rejection notifications will be e-mailed to the address provided in the BIDS registration. Debriefings for Quad Charts will not be conducted due to the nature of BAAs. In general, submissions are not considered for further review when they do not meet the basic requirement, are too costly, or do not fit the mission.

3.5.5. Phase 1 Status and Inquiries.

Phase 1 is complete when all submissions have been accepted or rejected in accordance with this BAA. Inquiries by phone concerning the status of Quad Charts will not be accepted. After login to the BIDS website, submitters are able to check the status of their submission(s) under **My Submissions**.

3.6. Phase 2 White Paper Submissions.

Offerors shall prepare and upload a White Paper with no more than twelve (12) pages plus a cover page in response to Phase 2 of this BAA. All submission pages shall be 8 ½ by 11 inches, double-spaced with fonts no smaller than 10 point; all margins shall be one inch. Each page of the submission shall contain the document identifier in the document header. If the White Paper contains more than 12 pages including tables, charts, and figures only the first 12 pages will be evaluated. All White Paper submissions must include a cover page. The cover page template is provided at the BIDS website under [Downloads, Reference Documents, Document Format](#). Cover pages are excluded from the White Paper page count.

3.6.1. Phase 2 Due Date and Time.

All unclassified White Papers must be received electronically through BIDS no later than the due date and time specified in the notification e-mail. Likewise, classified submissions must be received by the same due date and time. Refer to the "Special Handling Procedures for Classified Information" in this document for instructions on classified submissions. BIDS does not allow proposals to be uploaded or classified placeholders to be created after the due date and time. Any proposal, regardless of classification, submitted by any other means, or that is late

will not be considered by the Government.

3.6.2. Electronic File Format.

The White Paper shall be submitted in Microsoft Office (Word or PowerPoint), or Adobe Acrobat (PDF – portable document format) format. ZIP files and other application formats are not acceptable. The document must be print-capable, without password, and no larger than 500 kB. Filenames must contain the appropriate filename extension (.doc, .ppt, or .pdf). Filenames cannot contain spaces or special characters. Apple/Macintosh users must ensure the entire filename and path are free of spaces and special characters. Submissions that cannot be opened, viewed, or printed will not be considered.

3.6.3. Phase 2 Document Upload.

To upload a next phase document use the link back to BIDS provided in the acceptance e-mail, or login to BIDS under **My Submissions** to open the accepted record. Select **Create Next Submission** and follow the instructions.

3.6.4. White Paper Content.

White Papers shall provide a description of the technical approach, the specific tasks and deliverables by phase, schedule and cost estimate by phase, intellectual property and government rights, transition planning for production, and a capability statement. The offeror shall incorporate all clarification data requests from the acceptance e-mail into the submission. Indicate clarification entries by footnote and reference the requested item(s) in the footer area. The following White Paper sections and details are required.

3.6.4.1. Technical Approach.

Describe the proposed solution relative to the requirement. Focus content on operational capabilities required to address the problem, the underlying theory that supports the operational capability, and suggested concept of operations. Identify end users that could be interested in the proposed solution and describe how the solution will be a benefit. Include drawings, diagrams, charts, and tables needed to explain the effort. Describe if, and where, the proposed technology/solution has been, or is being used. Identify sponsoring agency and funding resources; or if none, so state.

3.6.4.2. Tasks and Deliverables.

Identify the proposed tasks by phase in the order of occurrence. A phase must have clear exit criteria to serve as a “go” or “no-go” decision point to proceed to the next phase. Identify work that will be performed by other organizations or agencies. Identify anticipated technical risks along with planned mitigation efforts. Indicate any Government furnished material (GFM), equipment (GFE), or information (GFI) that will be required with the task and need date; or if none, so state. For each phase include the exit criteria and all products and deliverables as defined in “Product and Deliverable Requirements” in section 2 of this document. If a phase is proposed as an option, so state.

3.6.4.3. Schedule.

Develop a master project schedule preferably in Gantt chart format. The schedule shall indicate the planned start and stop point for each phase with top level subordinate tasks, estimated delivery dates, and completion dates. Indicate the total project period of performance in months using January 2nd as a notional start date through the completion date.

3.6.4.4. Cost.

Provide the proposed, task-phased budgetary estimate inclusive of any proposed options. At a minimum, this estimate shall detail estimated labor hours and costs, anticipated material costs, product and deliverable costs (see section 2 General Information, “Product and Deliverable Requirements” in this document) and other costs (e.g., subcontracts, indirect

rates, fee rate) for each phase/task. Costs allocated to other organizations (e.g., Government testing) shall be clearly shown; or if none, so state. Changes in cost greater than 10% from those proposed in the prior submission shall be explained.

3.6.4.5. Intellectual Property, Technical Data, and Software.

Disclose/discuss all anticipated intellectual property, technical data, and/or software rights. See section 2 General Information, "Submission Handling/Rights in Technical Data and Computer Software/Patent Rights" in this document.

3.6.4.5.1. Patents and Patent Applications.

Identify any existing, applied for, or pending patents that will be used in the conduct of this effort. Provide Patent number or application number and title. Any patent that resulted from prior government funding should be identified. If no patents or patent applications are relevant, so state. See section 2 General Information, "Submission Handling/Rights in Technical Data and Computer Software/Patent Rights" in this document.

3.6.4.5.2. Rights in Technical Data and Software.

Identify any technical data and/or computer software that will be delivered with less than unlimited rights as prescribed in DFARS 252.227-7013 and DFARS 252.227-7014. If unlimited rights in technical data are proposed, so state. See section 2 General Information, "Submission Handling/Rights in Technical Data and Computer Software/Patent Rights" in this document.

3.6.4.6. Transition from Prototype to Production.

Describe the overall strategy to transition the results of this development effort to production once the funded effort is concluded. Briefly describe the overall strategy for transition, potential partners, transition issues to include any obvious regulatory, liability, interoperability, or financing issues. Discuss the interaction with representative users and the concept for test and evaluation by those users and follow on support of a product resulting from this effort.

3.6.4.7. Organizational Capability Statement.

Describe the offeror's capability and/or experience in doing this type of work. Identify technical team members or principal investigators and associated expertise. If applicable, include a description of co-participants' capabilities and/or experience. State whether an agreement has been reached (or not) with the co-participants.

3.6.5. Phase 2 Notifications to Offeror.

The Government will notify the offeror when a submission has been accepted or rejected. Notification of acceptance with a request to submit the next phase document will be e-mailed to the offeror's contracting authority as *entered in the BIDS registration* and will indicate the next submission type, clarification requests, and due date and time. Likewise, rejection notifications will be e-mailed to the address provided in the BIDS registration. **Debriefings for White Papers will not be conducted due to the nature of BAAs.** In general, submissions are not considered for further review when they do not meet the basic requirement, are too costly, do not fit the mission, or funding is not expected.

3.6.6. Phase 2 Status and Inquiries.

Phase 2 is complete when all submissions have been accepted or rejected in accordance with this BAA. Inquiries by phone concerning the status of White Papers will not be accepted. After login to the [BIDS website](#), submitters are able to check the status of their submission(s) under **My Submissions**.

3.7. Phase 3 Full Proposal Submissions.

Offerors shall prepare and upload technical Full Proposal with a separate detailed cost proposal in

response to Phase 3 of this BAA. All pages shall be 8 ½ by 11 inches, double-spaced with fonts no smaller than 10 point; all margins shall be one inch. Each page of the submission shall contain the document identifier in the document header. The technical portion must be no more than 50 pages including tables, charts, and figures. If the document contains more than 50 pages, only the first 50 pages will be evaluated. All paragraphs containing proprietary information must be clearly marked. The cover page and the detailed cost proposal are excluded from the Full Proposal page count.

Disclaimer - To minimize the cost and effort for submitters, Phase 3, Full Proposals, will only be requested for qualifying solutions that have a high probability of award; however, the Government reserves the right to cancel any request for proposal for this solicitation prior to award.

3.7.1. Phase 3 Due Date and Time.

All unclassified Full Proposals must be received electronically through BIDS no later than the due date and time specified in the notification e-mail. Likewise, classified submissions must be received by the due date and time. Refer to the "Special Handling Procedures for Classified Information" in this document for instructions on classified submissions. BIDS does not allow proposals to be uploaded or classified placeholders to be created after the due date and time. Any proposal, regardless of classification, submitted by any other means, or that is late will not be considered by the Government.

3.7.2. Electronic File Format.

The Full Proposal shall be submitted in Microsoft Office (Word or PowerPoint), or Adobe Acrobat (PDF – portable document format). The cost proposal may be submitted in Microsoft Office (Excel) format. ZIP files and other application formats are not acceptable. The document must be print-capable, without password, and no larger than 500 kB. Filenames must contain the appropriate filename extension (.doc, .ppt, .xls, or .pdf). Filenames cannot contain spaces or special characters. Apple/Macintosh users must ensure the entire filename and path are free of spaces and special characters. Submissions that cannot be opened, viewed, or printed will not be considered.

3.7.3. Phase 3 Document Upload.

To upload a next phase document, locate and open the accepted record in BIDS and select **Create Next Submission.**

3.7.4. Full Proposal Components.

Full Proposals shall consist of two major sections described in this document, and can be uploaded to BIDS in two separate files each limited to 500 kB each. The first section is the Technical Proposal and shall include all technical information related to the proposal including figures, charts, and tables plus the cover page. Second is the Cost Proposal to include all cost data as well as an explanation of changes in cost greater than 10% from those proposed in the prior submission.

3.7.5. Technical Proposal Content.

The Technical Proposal shall provide a technically detailed solution of the problem addressed in the requirement and fully expand the technology proposed in the prior submission. The following sections and associated data are required. The offeror shall incorporate all clarification data requests in the acceptance e-mail. Indicate clarification entries by footnote and reference the requested item(s) in the footer area.

3.7.5.1. Cover Page.

A cover page template is provided at the BIDS website under **Downloads, Reference Documents, Document Format.** The cover page includes necessary contractual information including the offeror's contracting point of contact (name, telephone number, e-mail address, facsimile number, mailing address) and business information (Data Universal Numbering System (DUNS) number, business type). Include the proposed contract type,

total cost, and the duration of all phases/tasks. Cover pages are excluded from the page count.

3.7.5.2. Abstract.

The abstract is a one page (or less) synopsis of the proposal that includes the title and the basic approach to satisfy the requirement. Describe the overall scope of work to be performed for the entire period of performance inclusive of options. The abstract shall stand-alone and be suitable for release under the Freedom of Information Act, 5 U.S.C. 552, as amended.

3.7.5.3. Executive Summary.

An executive summary is a concise description of the technology and solution being proposed. Include key information that demonstrates how the proposed solution meets the published requirement. The executive summary should not introduce any new information not covered in the subsequent content.

3.7.5.4. Technical Approach.

Describe the technical approach for the proposed solution to meet the requirement. Include technical details of the solution and fully expand the technology proposed in the prior phase submission. Include the methodology, underlying theory, system components, and operational scenario for the intended users. Include drawings, diagrams, charts, and tables needed to explain the effort. Describe relevant prior application of the proposed technology and/or solution, how it is being used, and by whom. Identify sponsoring agency and funding resources; or if none, so state.

3.7.5.5. Project Plan.

The project plan shall be organized by phase and describe the work to be performed along with all associated requirements to successfully complete the proposed effort. Include a summary of the individual phases to follow.

3.7.5.5.1. Phases.

Phases shall be defined by the subset of tasks to be performed, phase objectives to be accomplished, and the required period of performance to completion. Phases shall be listed in order of occurrence. Identify phases that are optional. Each phase must contain clear exit criteria that is measurable evidence of completion and serves as a "go" or "no-go" decision point. Each phase shall include a total cost.

3.7.5.5.2. Tasks within a Phase.

For each task, provide a detailed description of the work to be performed. Identify any work that will be performed by other organizations or agencies; or if none, so state. Indicate if an agreement is in place for the resources.

3.7.5.5.3. Products and Deliverables.

Identify all deliverables - products as well as documentation and reports - for each Task/Phase. Refer to section 2 of this document "Product and Deliverable Requirements" for the minimum report requirements, and additional products and deliverables in performance of the effort proposed.

3.7.5.6. Master Schedule.

Develop a master project schedule that includes phase start and stop dates as well as major milestones, critical tasks, and report and product delivery dates. Assume a start date of January 2nd. Indicate any optional phases.

3.7.5.7. Government Furnished Equipment.

Identify all Government furnished equipment, materials, facilities, or information with the need

date and suggested source. If Government equipment, materials, facilities, or information are not required, so state.

3.7.5.8. Project Risks and Mitigation.

Identify anticipated technical and management risks along with planned mitigation efforts. Indicate the risk assessment as high, medium, or low.

3.7.5.9. Organizational Capability Statement.

Include a brief description of the offeror's organization. Describe the offeror's capability and/or experience in doing the type of work being proposed. If applicable, include a description of co-participants' capabilities and/or experience. State whether an agreement has been reached with the co-participants. Provide at least three references, to include points of contact, for like or similar work.

3.7.5.10. Organizational Resources.

Identify key technical personnel and principal investigator(s) including alternates and co-participants, if applicable. Include a brief biography, relevant expertise, and a list of recent publications for each. Identify any team members with potential conflicts of interest. Possible conflicts of interest include personnel formerly employed by the federal Government within the past two years from the date of proposal submission. Provide name, duties, employing agency, and dates of employment; or if none, so state.

3.7.5.11. Intellectual Property, Technical Data and Software.

All anticipated intellectual property, technical data or software rights shall be disclosed. See section 2 General Information, "Submission Handling/Rights in Technical Data and Computer Software/Patent Rights" in this document.

3.7.5.11.1. Patents and Patent Applications.

Identify any existing, applied for, or pending patents that will be used in the conduct of this effort. Provide Patent number or application number and title. Any patent that resulted from prior government funding should be identified. State if no patents or patent applications are relevant.

3.7.5.11.2. Rights in Technical Data.

Identify any technical data and/or computer software that will be delivered with less than unlimited rights as prescribed in DFARS 252.227-7013 and DFARS 252.227-7014. State if unlimited rights in technical data are proposed.

3.7.5.12. Transition from Prototype to Production.

Describe the approach and issues related to transition or commercialization of the results of this effort to an operationally suitable and affordable product for the intended users to include the following. A Transition Plan should be included in the proposed costs.

3.7.5.12.1. Transition Strategy.

Provide the overall strategy for transition to production (licensing, partnering, or venturing) along with the associated timelines for actions associated with the transition. Describe the roles of current development partners, subcontractors, or other organizations that will be leveraged. If the offeror is not a commercial entity, indicate if a commercial partner has been identified. Discuss barriers to commercialization, such as anticipated regulatory issues (such as environmental, safety, health, and transportation), liability issues, interoperability, and financing, and planned steps to address these barriers.

3.7.5.12.2. Transition Approach.

Describe the type and level of effort envisioned to take the technology from its state at

the end of the development effort to a production ready, affordable, operationally suitable product (such as size and/or weight reduction, packaging, environmental hardening, integration, additional test and certification). Provide an estimate of any costs to transition the prototype to low rate initial production. Provide the estimated production unit price for the end users.

3.7.5.12.3. Test and Evaluation.

Describe the plan to involve representative users during the design and development process and the general plan for test and evaluation by representative end users.

3.7.5.12.4. Operational Support.

Describe the estimated level of training needed to prepare users to utilize the product in an operational environment. Discuss the anticipated support concept such as level(s) of repair, spare parts, warranties, operation and maintenance technical manuals, simulators, and other logistics considerations.

3.7.5.13. Human Subjects and Animal Testing.

The proposal shall provide a statement regarding the anticipated use of human subjects or animals in testing; or if none, so state. If yes, procedures for complying with all laws and regulations governing the use of animals or human subjects in research projects shall be included in the technical proposal. See section 2 General Information, "Animal of Human Testing Compliance" in this document for details.

3.7.5.14. Environmental Impact.

The proposal shall provide a statement regarding the impact of the work proposed on the environment. State if no impact exists.

3.7.5.15. Classification and Security.

If the offeror is proposing to perform research in a classified area, indicate the level of classification of the research and the level of clearance of the potential principal investigator and all proposed personnel. The contractor shall include facility clearance information. Also, the contractor shall indicate the Government agency that issued the clearances. State if the proposed effort is unclassified.

3.7.5.16. Subcontracting Plan.

If the total amount of the proposal exceeds \$500,000 and the offeror is not a small business, the offeror shall submit a subcontracting plan for small business and small socially and economically disadvantaged business concerns. A mutually agreeable plan will be included in and made a part of the resultant contract. The contract cannot be executed unless the contracting officer determines that the plan provides the maximum practicable opportunity for small business and small disadvantaged business concerns to participate in the performance of the contract. The Subcontracting Plan/information is excluded from page count.

3.7.6. Cost Proposal.

The offeror shall prepare and submit cost or pricing data, and supporting attachments in accordance with Table 15-2 of FAR 15.408. Submission of the Cost Proposal in Microsoft Office (Excel) format expedites processing by the reviewers. As soon as practicable after agreement on price, but before contract award, the offeror shall submit a Certificate of Current Cost or Pricing Data as prescribed by FAR 15.406-2 for cost type contracts exceeding \$650,000.

3.7.6.1. Cost Summary.

Provide a summary of the total cost for each phase and the total for the entire effort proposed. Indicate optional phases. Explain changes in cost greater than 10% from those proposed in the previous submission.

3.7.6.1.1. Other Funding Sources.

The proposal shall provide the names of other federal, state, or local agencies, or other parties receiving the proposal and/or funding or potentially funding the proposed effort. State if no other funding sources or parties are involved.

3.7.6.2. Detailed Cost Estimate.

Provide, in table format, a detailed cost breakdown by phase, of all items identified in the technical portion of the proposal for the following cost elements. Include all options.

3.7.6.2.1. Direct Labor.

Provide a list of the applicable labor categories or positions showing the breakdown of labor hours, rates, cost for each category, and furnish the basis for the estimates. Clearly indicate fiscal year rate changes and associated labor rate escalation calculations as applicable.

3.7.6.2.2. Indirect Costs.

Indicate how the offeror has computed and applied offeror's indirect costs. Indicate the rates used and provide an appropriate explanation.

3.7.6.2.3. Other Costs.

List all other costs not included in other sections (e.g., special tooling, travel, computer and consultant services, preservation, packaging and packing, spoilage and rework) and provide the basis for pricing.

3.7.6.2.4. Materials.

Provide a consolidated price summary of individual material quantities included in the various tasks and the basis for pricing (such as vendor quotes and invoices). Include new materials, parts, components, assemblies, and services to be produced or performed by others. For all items proposed identify the source, quantity, and price. Upon request, the offeror shall provide all backup and source data used for the basis for pricing.

3.7.6.2.5. Government Furnished Equipment.

List the property or materials required to perform the task. Separate items to be acquired with contract funds and those to be furnished by the Government. When possible, the description or title and estimated or known unit and total costs of each item should be shown (i.e., manufacturer, catalog price, or previous purchase price). When such information on individual items is not available, the items should be grouped by class and estimated values indicated. In addition, the offeror shall include a statement as to why it is necessary to acquire the property with contract funds, and if applicable, express in writing his unwillingness or financial inability to acquire the items with his own resources. NOTE: The FAR generally prohibits providing an industrial contractor with facilities (including plant equipment and real property) with a unit acquisition cost of less than \$10,000.

3.7.6.2.6. Fee.

Include the fee proposed for this effort. State if no fee is proposed.

3.7.6.2.7. Competitive Methods.

For those acquisitions (e.g., subcontract, purchase orders, material orders) over \$100,000 priced on a competitive basis, also provide data showing degree of competition and the basis for establishing the source and reasonableness of price. For inter-organizational transfers priced at other than cost of the comparable competitive commercial work of the division, subsidiary, or affiliate of the contractor, explain the pricing method (See FAR 31.205-26(e)).

3.7.6.2.8. Established Catalog or Market Prices/Prices Set By Law or Regulation.

When an exemption from the requirement to submit cost or pricing data is claimed, whether the item was produced by others or by the offeror, provide justification for the exemption.

3.7.6.2.9. Noncompetitive Methods.

For those acquisitions (e.g., subcontract, purchase orders, material orders) over \$650,000 priced on a noncompetitive basis, provide certified cost or pricing data showing the basis for establishing the source and reasonableness of price. For standard commercial items fabricated by the offeror that are generally stocked in inventory, provide a separate cost breakdown if price is based on cost. For inter-organizational transfers priced at cost, provide a separate breakdown of cost by elements.

3.7.6.2.10. Royalties.

If more than \$250 provide the following information on a separate page for each separate royalty or license fee:

- Name and Address of Licensor
- Date of the License Agreement (*See Note 1 below.*)
- Patent numbers, Patent Application Serial Numbers, or other basis on which the royalty is payable
- Brief description (including any part or model numbers of each contract item or component on which the royalty is payable)
- Percentage or dollar rate of royalty per unit
- Unit price of contract item
- Number of units
- Total dollar amount of royalties

Note 1: A copy of the current license agreement and identification of applicable claims of specific patents shall be provided upon request by the contracting officer. See FAR 27.204 and FAR 31.205.37.

3.7.6.2.11. Facilities Capital Cost of Money.

When the offeror elects to claim facilities capital cost of money as an allowable cost, the offeror must submit Form CASB-CMF and show the calculation of the proposed amount. See FAR 31.205-10.

3.7.7. Phase 3 Notifications to Offerors.

Notification of acceptance or rejection of a Phase 3 submission will be sent via e-mail to the offeror's principal contact as entered in the BIDS registration. If the Government does not accept the Phase 3 proposal, the offeror may request a formal debriefing in accordance with FAR 15.5.

3.7.8. Phase 3 Status and Inquiries.

Phase 3 is complete when the Government concludes technical evaluations of all submissions and awards any contracts considered under this BAA. Inquiries by phone concerning the status of Full Proposals will not be accepted. After login to the BIDS website, submitters are able to check the status of any submission under **My Submissions**.

4. PROPOSAL EVALUATION.

4.1. Objective.

The CTTSO conducts rapid prototype development focused on critical multi-agency and future threat counterterrorism and antiterrorism requirements. The primary mission is to conduct the National Interagency Research and Development (R&D) Program for combating terrorism through rapid research, development, and prototyping. The program objectives are to provide an interagency forum to coordinate R&D requirements for combating terrorism, to sponsor R&D not otherwise being addressed by individual agencies, and to promote information transfer among the participating agencies.

4.2. Evaluation Criteria.

The criteria used to evaluate and select proposals for projects are described as follows. Each proposal will be evaluated on its own merit and relevance to the program requirements rather than against other proposals in the same general research area.

4.2.1. Basic Requirement.

The proposed solution must meet the letter and intent of the stated requirement; all elements within the proposal must exhibit a comprehensive understanding of the problem and the requirements of intended end users. The proposed solution must meet multiple user (U.S. Government or commercial) needs and be fully compliant with all elements of the solicitation including format, content, and structure as well as all BAA instructions.

4.2.2. Cost.

The proposed costs must be both reasonable for the work proposed and achievable. The proposal must document all anticipated costs including those of associate, participating organizations. The proposal must demonstrate that the offeror has fully analyzed budget requirements and addressed resulting cost risks. The proposal must indicate all cost-sharing and leveraging opportunities explored and identified and the intellectual property expectations associated with that cost-sharing. Other sponsors who have funded or are funding this offeror for the same or similar efforts must be identified by agency, program manager name, phone number and e-mail address.

4.2.3. Schedule.

The proposed schedule must be reasonable, achievable, and complete. The proposal must indicate that the offeror has fully analyzed the project's critical path and has addressed the resulting schedule risks.

4.2.4. Technical Performance.

The proposed technical approach must be feasible, achievable, complete, and supported by a proposed technical team that has the expertise and experience to accomplish the proposed tasks. Task descriptions and associated technical elements are to be complete and in a logical sequence. All proposed deliverables must clearly define a final product that meets the requirement and can be expected as a result in the award. The proposal must identify and clearly define technical risks and planned mitigation efforts. Those risks and the associated mitigation must be defined, feasible and reasonable. The roles of the prime and other participants required must be clearly distinguished and pre-coordination with all participants (including Government facilities) fully documented. The requirement for and the anticipated use or integration of GFM including all equipment, facilities, and information, must be fully described including dates when such GFM will be required. Intellectual property ownership and the planned transition to production must be adequately addressed, including a support concept for the product described. Similar efforts completed by the offeror in this area must be fully described including identification of other Government sponsors.

4.2.5. Contractor Past Performance.

The offeror's past performance in similar efforts must clearly demonstrate an ability to deliver products that meet the proposed technical performance requirements within the proposed budget and schedule. The proposed project team must have demonstrated expertise to manage the cost, schedule and technical aspects of the project.

5. TECHNOLOGY DEVELOPMENT REQUIREMENTS AND OBJECTIVES.

CTTSO is interested in soliciting proposals in the following areas of combating terrorism. The intent of this BAA is to identify technologies and approaches that provide near-, mid-, and long-term solutions that enhance the capabilities of the U.S. Government to combat or mitigate terrorism. The level of detail and order of appearance for a given requirement are not intended to convey any information regarding relative priority.

5.1. Blast Effects and Mitigation (BX)

Mission: Identify, prioritize and execute projects that satisfy interagency requirements to define and mitigate the potential damage to structures, critical infrastructure, and humans from conventional and enhanced explosive mixtures.

2289 Blast Waves in an Urban Canyon Environment

Collect empirical data from within a one-half- to full-scale complex urban environment during the detonation of numerous explosive charges. The empirical data generated will be provided to key suppliers of hydrocodes and fast running blast effects models used by the DoD. The proposer will establish parameters and input for the modelers to allow for validation of the codes in order to better understand the results of the model predictions when compared to actual ground truth. The urban environment is part of a current TSWG effort and is located at the Energetic Materials Research and Testing Center (EMRTC), Socorro, NM. As such, proposers shall coordinate the physical testing with EMRTC. The proposer shall act as the lead interface to develop test plans, ensure tests are performed properly, disseminate empirical test data, and coordinate with key commercial and DoD owners of computational fluid dynamic codes and fast running engineering codes used in blast analysis. All personnel involved in this test program should possess a minimum of a SECRET security clearance.

5.2. Concept Development (CD)

Mission: Identify, prioritize, and execute projects that satisfy interagency requirements to increase national counterterrorism capabilities including emerging technology programs that complement traditional mission areas.

2304 Alternative Methods of Analysis

Provide alternative tools and/or methodologies (e.g., mathematical modeling, statistical algorithms, visualization technologies, finance and corporate problem solving/risk alleviating techniques, etc.) for collecting, processing, and analyzing large quantities of disparate data from primarily open sources. Develop a proof of concept to validate the applicability of nontraditional analytic methods against selected intelligence requirements. Demonstrate the ability of such tools and/or methodologies to provide comprehensive, timely, accurate and viable intelligence products (e.g., risk assessments, human relationship analysis).

5.3. Explosives Detection (ED)

Mission: Identify, prioritize, and execute projects that satisfy interagency requirements for existing and emerging technology in explosives detection and diagnostics. Emphasis is on long-term, sustained approaches leading to new and enhanced technology for detection and identification of improved explosive devices and large vehicle bombs.

2299 Tandem Specialized Search Dogs

Develop and implement training and handling protocols that enable a handler to direct two search dogs working in tandem. The tandem team (dogs and handler) must be able to search and detect improvised explosive devices (IEDs), and weapon caches, and gather intelligence information in roadways and other open areas. Tandem Specialized Search Dog (T/SSD) teams must be able to demonstrate a large area search with the T/SSDs searching in unison and within a reasonable time (e.g., leading a foot patrol unit). Canine candidate teams must be compatible with each other and work independently in response to handler commands off lead (i.e., voice,

hand, and/or arm signals) at remote distances of up to 300-500 meters in open environments and by line of sight in urban settings. Operation at distances up to 1000 meters using a communication device (e.g., tone/radio) is desired. Candidate breeds must be tolerant of both hot (desert) and cold (mountain) climate extremes, and be adept at explosives detection. Canines must demonstrate a high energy level, be nonaggressive when in proximity to handlers and other personnel in working environments, have good focus, and be tolerant of loud noises such as gun fire, other weapon discharge, or equipment operations. Handlers must be able to direct the dogs, off leash, at the same time while performing other duties related to operations in a war zone. Auxiliary canine equipment (such as, tone or radio devices) can be used for this effort, but are not required.

The solution should include:

- Canine and handler training protocols;
- Minimum of two trained canines;
- Handler traits - identifying characteristics and qualities for handling and directing two canines at the same time;
- Breed recommendations - identifying specific breeds suitable for detection work in tandem and off leash scenarios; and
- A demonstration at a Government-selected facility in the Southwestern U.S..

2314 Explosives Chemical Signature Database

Develop a database that provides detailed compositional analysis of chemical signatures of explosives. Data must document differences in the explosives composition by energetic type; country of origin (if commercially manufactured); the identification, percent composition and role of any modifier, binder, or additive other than the high-explosive (including processing materials present only as impurities in the final product); and the optical signature (Ultraviolet through the Terahertz) of all components. Data must also include significant thermal and photo-decomposition products of explosives and their residues as well as potential interferents, masking agents, and others sources of false positives. All data must be fully documented and validated to ensure the accuracy and reliability of the results.

The solution should include sample collection and identification of explosive signatures or other chemical compounds within a mixture that can be used for future development and evaluation of field deployable standoff detection capabilities.

If a white paper is requested, the submitter shall provide detailed methods and protocols proposed to acquire the information. All methods and protocols developed should be validated by an appropriate body, such as Environmental Protection Agency (EPA), American Society for Testing and Materials (ASTM), or Association of Analytical Communities (AOAC) International, and made available to the explosives detection community.

5.4. Explosive Ordnance Disposal/Low-Intensity Conflict – EOD/LIC (EL)

Mission: Identify, prioritize, and execute projects for military explosive ordnance disposal, and special operations forces to meet the challenges of the war on terrorism and force protection. Technologies are focused on detection, access, identification, and neutralization of conventional explosive ordnance and improvised explosive threats on land, sea, and underwater.

2261 Tankless Exothermic Cutting Torch

Develop and test an exothermic cutting torch that does not require a compressed gas or air supply to operate up to 10,000 degrees Fahrenheit. The torch lance must provide a nozzle flow-rate capable of clearing slag/debris produced by cutting the target material. The cutting torch must cut a minimum of one inch thick hardened steel and a length of 20 inches (threshold). The cutting flame must be generated chemically, on-demand, through the thermal decomposition of a compound (i.e., such as a superoxide, peroxide, chlorate, or perchlorate). Integration of both fuel and the chemistry necessary for on-demand oxygen generation into the lance is preferred. The

torch must be safe to carry and operate, and provide significant enhancements in performance, portability, deployability, ease of use, and also reduce the logistics support required in commercially available systems. The torch handle must be equipped with a deflector shield, include an electronic ignition source, power supply, and configured to easily remove expended/consumed burn rods. System design must support partial burn rod consumption by positively extinguishing the torch lance and support re-ignition of the torch lance in instances where partial cuts are required without having to eject the used burn rod and replacing it with another rod.

The objective of this development is to eliminate the need for a compressed oxygen supply, associated hoses, regulators, valves, and couplings. Furthermore, the goal of this effort is to minimize or eliminate associated vulnerabilities, risks, and operational limitations incurred by current cutting systems.

5.5. Improvised Explosive Device Defeat (IDD)

Mission: Identify, prioritize, and execute projects that satisfy interagency requirements to more safely and effectively render terrorist devices safe. Particular emphasis is placed on technologies to access, diagnose, and defeat terrorist improvised explosive devices (IEDs), improvised chemical, biological, radiological, and nuclear (CBRN) devices, and vehicle-borne improvised explosive devices (VBIEDs).

2244 Remote Control Package for Commercial Off-The-Shelf (COTS) Utility Vehicle

Develop a remote control package that is compatible with the Kawasaki Mule. Other vehicle platforms will be considered; however, the Mule is highly desirable. The remote package must include operator capabilities to move the vehicle forward, turn left, turn right, control acceleration and braking, and disconnect a payload-loaded trailer. The system must be operable from an extended range. System must be fast and simple to install and detach in the field with a minimum of specialized tools. Utility vehicles must easily convert between normal and remote operation with minimal effort (e.g., flip of a switch). Unit costs must be low and affordable for state and local bomb disposal units.

2249 Improved Manipulator End Effectors for Remotely Controlled Vehicles (RCVs)

Develop improved manipulator end effectors/grippers for robotic platforms that provide enhanced dexterity. Proposed systems must provide for the use of three or more fingers and be [Joint Architecture for Unmanned Systems \(JAUS\)](#) compliant and easily retrofitted onto existing robotic arms. End effectors/grippers must allow for gripping/manipulation of small objects and individual strands of wire (20 gauge and greater). Systems must be easily reconfigured to a wide range of applications. Solutions offering multiple end effectors/grippers designs that can be changed in the field are highly desired. Full functionality in harsh environments, all weather conditions, and temperature ranges is required.

Additional capabilities desired include:

- A robot that mimics human mobility and manipulation;
- Grips clothing easily;
- Strength to drag heavy objects – comparable to the towing capacity of the RCV;
- Views from the end effectors/grippers camera should be unobstructed;
- Gauge that indicates the amount of pressure applied to a target item; and
- Simple user commands.

2271 Low Cost Unmanned Aerial Recon System

Develop an unmanned aerial recon system that provides a viewing capability of an improvised explosive device (IED)/Vehicle Borne Improvised Explosive Device (VBIED) incident site. The platform must provide for extended range and sight that will allow the operator to be a safe distance away from the incident site and provide for operational awareness of the site prior to bomb technicians engaging in render safe/disruption procedures. The system must deploy rapidly and be operational by one individual with minimum experience in basic flight functions.

System must function indoors and outdoors in differing weather conditions and able to withstand the rigors of any operating environment. A power supply that provides greater than 15 minutes operational use per charge (30 minutes objective) is highly desired. The end-unit cost of a developed system must be less than \$5,000, with a preferred cost of less than \$3,000. Commercial-off-the-shelf hover platform technologies that can be modified are of particular interest.

Minimum video system requirements must include:

- Color CMOS or CCD Camera with microphone;
- 380 lines of resolution (480 lines Objective);
- Ground Station Receiver with Color Monitor;
- Less than two lux light handling capability;
- Variety of fields of view (i.e., 60, 90, 120 degree wide-angle field of view (FOV)); and
- Pan/Tilt capability of onboard camera is desired.

000-ID Unspecified Requirement - IDD

New or improved technologies, or emerging technological capabilities pertaining to improvised device defeat (IDD) but are not specifically requested in this BAA are sought. Future interests must be timely, relevant, and further the global war on terrorism (GWOT). Potential interests include but are not limited to:

- Improved tools and equipment to increase the safety and effectiveness of Explosive Ordnance Disposal (EOD) and bomb technicians;
- Technologies to access and accurately locate and/or identify components within Improvised Explosive Devices (IEDs) and Vehicle Borne Improvised Explosive Devices (VBIEDs);
- Advanced technologies to defeat IEDs and VBIEDs that increase standoff capabilities, reduce collateral damage, and provide precision disruption and disablement capabilities; and
- Technologies to improve the tethered and untethered (wireless) control of robotic systems and the performance, reliability, and endurance of robotic systems for bomb technicians.

Commercial-off-the-shelf systems or long-term research efforts will not be considered. Areas that do not directly relate to IDD will be rejected without consideration or comment.

Unspecified requirements (R000) are for proposing unique innovations that have not yet been identified by TSWG. Submissions against an unspecified requirement should be relevant to that subgroup's mission. Funds are not budgeted for unspecified requirements. If the evaluation team determine that an unspecified requirement submission is promising enough to merit pursuing, funds will be identified at that point. Because proposed technologies from the unspecified requirements will be competing against proposed technologies for identified and prioritized interagency requirements, TSWG may be unable to make any awards against the unspecified requirements.

5.6. Irregular Warfare Support (IWS) Program

Mission: Identify, prioritize, and execute projects to solve non-traditional problems in the global war on terror for joint, interagency, and international irregular warfare efforts to include doctrine, organization, training, materiel, leadership, personnel, and facilities. This program uses innovative and integrated processes of operational analysis, capability development, and pilot program testing and implementation to defeat insurgent organizations, motivations, sanctuaries, and enabling enterprises.

000-IWS Unspecified Requirement - IWS

The Government seeks concepts in the four focus areas: Counter-Sanctuary, Counter-Motivation, Counter-Organization, and Counter-Enterprise. Concepts should advance the [2006](#)

[Quadrennial Defense Review](#). Other documents for consideration include **National Security Presidential Directive/NSPD-44**, and [DoD Directive 3000.05](#). Submit under this number and title any strategic, operational or tactical concepts that will enhance United States and Partner Nation capability to conduct Irregular Warfare.

Unspecified requirements (R000) are for proposing unique innovations that have not yet been identified by the program. Submissions against an unspecified requirement should be relevant to that program's mission. Funds are not budgeted for unspecified requirements. If the evaluation team determines that an unspecified requirement submission is promising enough to merit pursuing, funds will be identified at that point. Because proposed capabilities from the unspecified requirements will be competing against proposed capabilities for identified and prioritized interagency requirements, the program may be unable to make any awards against the unspecified requirements.

5.7. Tactical Operations Support (TOS)

Mission: Identify, prioritize, and execute projects that satisfy DoD and interagency user requirements for equipment and systems to support specialized force offensive operations directed against terrorist activities and groups. The use of nonsensitive prototype hardware for state and local law enforcement agencies is considered for transition and commercialization.

2142 Standoff Vehicle Stopper

Develop a standoff system that is capable of stopping a single moving vehicle in traffic for use during pursuit or assault operations where the mission is to obtain custody of the vehicle occupants. Systems must provide the capability to stop a vehicle without anticipating the vehicle's route, allow for multiple attack angles (front, side or rear of target vehicle), allow for repeated target engagements and cause no – or minimized – harmful effects upon vehicle occupants and uses some form of directed energy (DE). Systems that deploy from helicopters are highly desirable; however, proposals that provide a ground vehicle platform and show a clear transition to mobile platforms (ground or helicopter) will be considered. Proposals for basic research or studies, or that involve physical contact, disruption or impediment of the targeted vehicle by projecting items with mass (examples include precision weapons fire, capture nets or obscurants) will not be considered.

Desired Characteristics:

- Deploy and operate from a helicopter (objective) or vehicle (threshold) and stop a vehicle from a minimum standoff range of 100 meters (threshold) or 300 meters (objective), when the target vehicle is moving in traffic with a minimum of 20 meters separation between other vehicles;
- Disable a vehicle and stop its forward movement within 60 seconds (Threshold) or 15 seconds (Objective) and is capable of repeated target engagements;
- Transmit energy directionally and not interfere with the normal safe operation of the transport aircraft or vehicle;
- Support emplacement and operation from multiple orientations (Side, front, belly, rear, etc.) on the host aircraft or vehicle by a single operator; (Objective)
- Stop a variety of modern export sedans, vans, pickup trucks, and cargo trucks manufactured after 1993 by Toyota, BMW (Turbo), KIA, Mercedes, Opel, Nissan, and Honda;
- System setup time in a helicopter and/or a vehicle should be 45 minutes (Threshold) or 10 minutes (Objective);
- Minimum physical bulk and weight. Objective size is less than 4 feet (wide) by 8 feet (long) by 3 feet (high) and weight is less than 150 pounds;
- Compatible with the power and electronic systems of current military helicopters or combat vehicles (Objective);
- Operation of the system should pose minimum (threshold) or no (objective) health threat to the system operator and occupants of the employment platform. Also, effects of a

system attack should pose minimum (threshold) or no (objective) health threat to the occupants of the target vehicle as well as nearby vehicles and pedestrians; and

- The system must employ "open architecture" software to support maximum integration with other helicopter and vehicle systems, as necessary (Objective).

2228 High Intensity Tactical Vehicle Infrared (HITIR) and White Headlight System

Develop an integrated high-intensity 24-volt vehicle headlight system that incorporates both infrared (IR) and white light capability. Infrared illumination provided at night must supply adequate illumination to support driving speeds not to exceed 65 mph when the driver is wearing Night Vision Goggles (NVGs). Solutions proposing a replacement IR light for the existing blackout drive light that meet stated IR illumination and functionality will also be considered. The primary deliverable from this development effort shall be 10 functioning prototype HITIR headlight systems (or IR replacement lights for the blackout drive light) complete with mounting hardware.

Desired Characteristics:

- Integrate into current military tactical vehicles (i.e., HMMWVs) with no modification required using the existing vehicle wiring harness;
- Have the same form and fit as the existing headlight assembly;
- Mount into the vehicle in the same location using the same mounting hardware as the existing headlight assembly;
- Incorporate both high and low beam adjustments that are driver activated using the existing high/low beam switch. IR illumination should vary in both beam intensity and spot/focus;
- Use existing headlamp light switch or the blackout drive switch to include a positive control for switching between white light and IR light. This switch should prevent inadvertent activation of the white light from IR position without a positive action by the vehicle operator. To the maximum extent possible, the master control switch should be common to all U.S. Military vehicles; and
- Be replaceable and maintainable at the operator level.

2229 IR Illuminators with Motion Sensors (Remote and Network Capable)

Develop a rugged, lightweight, man-portable, wireless IR illuminator and motion sensing system for use by small tactical teams to enhance site security when remaining overnight at temporary hide sites, safe houses or small base camps. The system must be functional in open terrain as well as limited avenues of approach like mountain passes/caves or city streets and alleyways. Each light/sensor system must be deployable as a stand-alone unit or in a network of two to six systems controlled by a wireless hand-held remote control device. Proposed systems must significantly enhance the ability of a sentry to monitor all avenues of approach or areas of interest and provide early warning of potential threats. Systems must be fully functional in a wide variety of weather conditions and global environments. The primary deliverable from this development effort will be ten functioning prototype light/sensor systems and five hand-held remote control devices that can be assessed by military operators.

Desired System Characteristics:

- Include, as a minimum, two main components: a wireless remote controllable high intensity IR light with motion sensor(s), support structure (tripod, etc.) and power source; plus a wireless, hand-held monitor/remote-control device capable of controlling single, or multiple, remote light/sensor systems;
- Be one man-portable and fit into a military ruck sack or rugged container for transportation and storage;
- Be setup by one person in 10 minutes or less (threshold); five minutes or less (objective);
- Have long range wireless remote operation; (100 meters-threshold; 500 meters-objective);
- Include a COTS/GOTS self-contained power source(s) capable of 48 hours of operation

- in stand by mode and four hours of active operation at max power;
- Be self-locating (GPS) and software upgradeable;
- Automatically network with other light/sensor systems (up to a total of six) within 100 meters (threshold) and 500 meters (objective) of the hand-held remote control device. The network should be self-healing;
- Have multiple anchor points for attaching mechanical suspension cables, wires, rope, etc.;
- Include a selection of camouflage, e.g., a fake rock, tree limb, telephone pole box, etc.;
- Be capable of autonomous operation when the hand-held remote control device is unavailable (IR light will illuminate suspected intruder upon detection by motion sensor);
- Have a manual switch on the light/sensor component to allow selection of autonomous or remote control operation; and
- Employ "open architecture" software to support maximum integration with other tactical unit systems, as necessary (Objective).

Desired characteristics of the handheld remote control device:

- Have an operating range of 100 meters (threshold); 500 meters (objective);
- Be capable of controlling and networking at least six light/sensor systems simultaneously;
- Allow the operator to receive alerts from any of the motion sensors and select the best IR light, or combination of IR lights, to use in illuminating the suspected intrusion area;
- Allow the operator to receive alerts from an external sensor and direct illumination to that area of interest; and
- Be self-locating (GPS).

Desired characteristics for the IR light on the light/sensor component:

- Have adjustable beam width (3 degrees to 120 degrees) and intensity/power output;
- Provide illumination out to 1,000 meters at the narrowest beam width and highest intensity/power output; and
- Be able to pan 360 degrees and tilt from 0 degrees to 135 degrees.

Desired characteristics for the motion sensor(s) on the light/sensor component:

- Detect human sized objects out to 50 meters (threshold) and 100 meters (objective);
- Provide 360 degrees sensor coverage; and
- Have sensitivity adjustments.

5.8. VIP Protection (VIP)

Mission: Identify, prioritize, and execute projects that satisfy interagency requirements for unique equipment and systems to alert and prevent attacks on VIP protectees. This includes hardware and tools that provide security to both the VIPs and their protectors. Inherent in this development is additional emphasis on life safety and emergency response equipment.

2293 Portable Man-Portable Air Defense System (MANPADS) Detection System

Develop a portable MANPADS detection system that is capable of detecting all MANPADS threats during the prelaunch cycle. The system must provide accurate detection of MANPADS within their effective range of a landing zone. It is highly desirable that the system also provide location information for the detected threats. The system sensors must be inconspicuous, disposable, include an antitamper and auto destruct features, and be capable of being deployed from both ground and fixed and rotary wing air assets. The system must provide at least 24 continuous hours of operation and include a single man-portable command and control station that provides a display of the coverage area, sensor health and status, and threat alerts. When deployed, the sensors must be quickly located in the command and control system. The system must allow rapid alerting to aircrafts that are vulnerable to the threat. The system must reliably operate in the full range of environmental conditions and function without failure in the vicinity of Improvised Explosive Device (IED) jamming systems.

2296 Man-Portable Surveillance System

Develop an inconspicuous man-portable surveillance system (approximate size 16 inches x 12 inches x 9 inches) that streams near real-time encrypted (DES3, AES, or FIPS 140-2) video with voice-over-IP (VOIP) to an existing mobile command center via the cellular network canopy. To support communications in various mission areas modems (EVDO, CDMA2000, GSM) must be interchangeable. The camera must have a minimum field of view of 20 degrees, and resolution must allow identification of faces and license plates at a range of 30 yards. The system must be ruggedized for harsh environments and operate continuously for a minimum of four hours. It is desired that the system have a small storage device (minimum 500 GB), in the event of connection loss. The mobile command center will be made available for system design and validation.

2298 Ruggedized VIP Security Kit

Develop a ruggedized intrusion and vehicle tamper detection kit for outdoor use in transient locations. The kit must include cameras, motion detectors, break sensors, and vehicle tamper detection components. The cameras must provide day/night, infrared (IR), pan/tilt/zoom, and motion detection with a minimum range of 100 meters and a desired range of 1 kilometer. Kit components must be small, concealable, reliable, and ruggedized for use in harsh environmental conditions. All components must have the ability to function wirelessly using independent power supplies both CONUS and OCONUS. Components must operate continuously for a minimum of 16 hours, with a desired operation time of 7 days. It is desired military grade batteries be used to power the cameras. The kit must include a central monitoring station that displays real time data from the cameras, intrusion sensors, and vehicle tamper detection components, and provide visual and audible alerts of intrusions and tamper events. All data transmissions must be encrypted. The system must be packaged in civil aviation carry-on containers (approximately 9 inches x 14 inches x 22 inches), designed for rapid installation by operations personnel with minimal training. The system must be designed with an open architecture so it can be expanded and upgraded as technology improves. The system must be cost effective and scalable, allowing users to customize the amount and types of equipment to meet mission requirements.

ATTACHMENT A – ACRONYMS AND ABBREVIATIONS

µg	micrograms		designation); Also Compact Disk
24/7	Twenty-four hours/Seven days per week	CDC	Center for Disease Control
3-D	Three-Dimensional	CDMA	Code Division Multiple Access
AC	Alternating Current	CDR	Critical Design Review
ACLS	Advanced Cardiac Life Support	CD-ROM	Compact Disc Read Only Memory
ADL	Advanced Distributed Learning	CENTCOM	U.S. Central Command
AES	Advanced Encryption Standard	C.F.R.	Code of Federal Regulations
AFIS	Automated Fingerprint Information System	cm	centimeter
ANSI	American National Standards Institute	CMOS	Complementary Metal Oxide Semiconductor
AOAC	Association of Analytical Communities (International)	CMU	Concrete Masonry Unit
APR	Air Purifying Respirator	COFDM	Coded Orthogonal Frequency Division Multiplexing
ASTM	American Society for Testing and Materials	CONUS	Continental United States
ATLS	Advanced Trauma Life Support	COR	Contracting Officer's Representative
ATP	Active Thermal Protection	CORDRA	Content Object Repository
AUV	Autonomous Underwater Vehicle		Discovery and Registration/Resolution Architecture
BAA	Broad Agency Announcement	COTS	Commercial-off-the-shelf
BATM	Biological Aerosol Test Method	CPFF	Cost Plus Fixed Fee
BIDS	BAA Information Delivery System	CPU	Central Processor Unit
BX	Blast Effects and Mitigation (mission area/subgroup designation)	CQB/SWAT	Close Quarter Battle/Special Weapons Assault Team
C	Celsius	CSA	Canadian Standards Association
C3	Command, Control, and Communications	CSDB	Common Source Database
C4	Composition 4 (explosive)	CT	Computed Tomography
CAD	Computer Aided Drawing	CTTSO	Combating Terrorism Technology Support Office
CASB-CMF	Cost Accounting Standards (CAS) Board - Cost of Money Factors	DAIS	Digital Automotive Image System
CB	Chemical, Biological, Radiological, and Nuclear Countermeasures (Also CBRNC or CBRN or CBR) (mission area/subgroup designation)	DC	Direct Current
CBRN	Chemical, Biological, Radiological, and Nuclear	DE	Directed Energy
CCD	Charge-Coupled Device	DES	Data Encryption Standard
CCR	Central Contractor Registration	DFARS	Defense Federal Acquisition Regulation Supplement
CCTL	Common Criteria Testing Labs	DHS	Department of Homeland Security
CD	Concept Development (mission area/subgroup	DMSO	Defense Modeling and Simulation Office
		DNA	Deoxyribonucleic acid
		DoD	Department of Defense
		DOE	Department of Energy
		DOT	Department of Transportation
		DPI	Dots per inch
		DTRA	Defense Threat Reduction Agency
		DUNS	Data Universal Numbering System

07-Q-4057 BAA Package

March 7, 2007; Rev 1: 3/19/07

ED	Explosives Detection (mission area/subgroup designation)	GIF	Material
EFTS	Electronic Fingerprint Transmission Specification	GIS	Graphics Interchange Format Geographic Information System
EL	Explosive Ordnance Disposal/Low-Intensity Conflict (Also EOD/LIC) (mission area/subgroup designation)	GOTS	Government-off-the-shelf
EOD	Explosive Ordnance Disposal	GPS	Global Positioning System
EOD/SOF	Explosive Ordnance Disposal/Special Operations Forces	GSM	Global System for Mobile Communications
EPA	Environmental Protection Agency	GSR	Gunshot Residue
EMRTC	Energetic Materials Research and Testing Center	GUI	Graphical User Interface
ERPG	Emergency Response Planning Guidelines	GWOT	Global War on Terror
ET	Eastern Time Zone	HAZMAT	Hazardous Materials
ETD	Explosives Trace Detection	HBCU	Historically Black Colleges and Universities
ET-SCBA	Expedient Tactical Self-Contained Breathing Apparatus	He	Helium
EVDO	Evolution-Data Optimized	HITIR	High Intensity Tactical Vehicle Infrared
F	Fahrenheit	HME	Homemade Explosive Materials
FAQ	Frequently Asked Question	HMMWV	High-Mobility Multipurpose Wheeled Vehicle
FAR	Federal Acquisition Regulation	HPAC	Hazard Protection and Assessment Capability
FBI	Federal Bureau of Investigation	HSEEP	Homeland Security Exercise and Evaluation Program
FCC	Federal Communications Commission	HUB Zone	Historically Underutilized Business Zone
FCCM	Facilities Capital Cost of Money	HUD	Head's Up Display
FDA	Food and Drug Administration	HVAC	Heating, Ventilation, and Air Conditioning
FDE	Forensic Document Examiner	Hz	Hertz
FDR	Flight Data Recorder	ICIDS	Integrated Commercial Intrusion Detection System
FFT	Fast Fourier Transform	IDD	Improvised Device Defeat (mission area/subgroup designation)
FIPS	Federal Information Processing Standards	IDHL	Immediately Dangerous to Health or Life
FOIA	Freedom of Information Act	IED	Improvised Explosive Device
FORAX	Fiber Optic Remote Amplifier Extension	IMS	Ion Mobility Spectrum
FOV	Field of View	IO	Input/Output
FP	Full Proposal	IP	Infrastructure Protection (mission area/subgroup designation); also Internet Protocol
fps	Feet per second	IR	Infrared
FSW	Feet of Sea Water	IRB	Institutional Review Board
ft	Feet	IRIG	Inter-Range Instrumentation Group
FY	Fiscal Year	IS	Investigative Support and Forensics (Also ISF) (mission area/subgroup designation)
GB	Gigabyte	IW-JOC	Irregular Warfare Joint Operating Concept
G/T	Gain to Noise	IWS	Irregular Warfare Support
GFE	Government Furnished Equipment		
GFI	Government Furnished Information		
GFM	Government Furnished		

07-Q-4057 BAA Package

March 7, 2007; Rev 1: 3/19/07

	(mission area/subgroup designation)		Occupational Safety and Health
JAUS	Joint Architecture for Unmanned Systems	NIPP	National Institute for Public Policy
JPEG	Joint Photographic Experts Group	NIST	National Institute of Standards
K	Thousand	NRP	National Response Plan
kB	Kilobyte	NSPD	National Security Presidential Directive
keV	Kilo-electron volts	NVG	Night Vision Goggles
kg	Kilograms	OA	Operational Analysis
kV	Kilovolt	OAS	Obstacle Avoidance System
L	Liter	OASD	Office of the Assistant Secretary of Defense
LANL	Los Alamos National Laboratory	OCONUS	Outside CONUS
Lbs	Pounds	OCU	Operator Control Unit
LCD	Liquid crystal display	ORCA	Online Representations and Certifications Application
LED	Light emitting diodes	OS	Operating System
LIC	Low-Intensity Conflict	OSHA	Occupational Safety and Hazard Association
LMS	Learning Management System	PAPR	Powered Air Purifying Respirator
LOS	Line of Sight	PC	Personal Computer
LVB	Large Vehicle Bomb	PCB	Printed Circuit Board
LUX	Lumen per square meter	PCR	Polymerase Chain Reaction
MANPADS	Man Portable Air Defense System	PCS	Process Control System
MB	Megabyte	PDA	Personal Digital Assistant
MBITR	Multi-Band Inter/Intra Team Radio	PDF	Portable Document Format
mg/L	milligram per liter	PDR	Preliminary Design Review
MHz	Megahertz	PETN	pentaerythritol tetranitrate
MI	Minority Institutions	pg/mil	picograms per milliliter
MILES	Multiple Integrated Laser Engagement System	PL	Public Law
MILSPEC	Military Specification	POC	Point of Contact
ml/min	milliliter per minute	POP	Period of Performance
mm	millimeter	POTS	Plain Old Telephone Service
mR	milli-Roentgen	PPE	Personal Protective Equipment
MOA	Minute of angle	PPI	Pixels per Inch
MSR	Monthly Status Report	PS	Physical Security (mission area/subgroup designation)
MSS	Mobile Screening System	PSTN	Public Switched Telephone Network
NAICS	North American Industry Classification System	PSYOPS	Psychological Operations
NATO	North Atlantic Treaty Organization	QC	Quad Chart
NBC	Nuclear, Biological, and Chemical	QUIC	Quick Urban and Industrial Complex
NCID	National Critical Infrastructure Database	R&D	Research and Development
NFPA	National Fire Protection Association	Rad	Radians
NGEODRCV	Next Generation Explosive Ordnance Disposal Remote Controlled Vehicle	RAM	Random Access Memory
NIJ	National Institute of Justice	RAMP	Remote Multi-band Amplifier
NIMS	National Incident Management System	RCV	Remote Controlled Vehicle
NIOSH	National Institute for	RDD	Radiological Dispersion Device
		RDX	Cyclotrimethylenetrinitramine
		RF	Radio Frequency
		RFID	Radio Frequency Identification
		RH	Relative Humidity

07-Q-4057 BAA Package

March 7, 2007; Rev 1: 3/19/07

RKB	Responder Knowledge Base	TTL	Tagging, Tracking, and Locating
ROM	Rough Order of Magnitude	TTP	Tactics, Techniques, and Procedures
RPG	Rocket Propelled Grenade	UAV	Unmanned Air Vehicle
RT	Receiver/Transmitters	UL	Underwriter's Laboratory
SAHRV	Semi-Autonomous Reconnaissance Vehicle	UML	Unified Modeling Language
SBA	Small Business Administration	USAR	Urban Search and Rescue
SC	Surveillance, Collection, and Operations Support (Also SCOS) (mission area/subgroup designation)	USB	Universal Serial Bus
SCADA	Supervisory Control and Data Acquisition	U.S.C.	United States Code
SCBA	Self-Contained Breathing Apparatus	UV	Ultraviolet
SCORM	Shareable Content Object Reference Model	VAC	Volts AC (alternating current)
SECNAVINST	Secretary of the Navy Instruction	VBIED	Vehicle Borne Improvised Explosive Device
SEI	Software Engineering Institute	VCSTC	Virtual Cyber Security Testing Capability
SDB	Small Disadvantaged Business	VCU	Vehicle Control Unit
SF	Special Forces; also Standard Form	VIP	Very Important Person
SIT	Submitter Internal Tracking (Number)	VIP	VIP Protection (mission area/subgroup designation)
SNM	Special Nuclear Material	VOIP	Voice Over Internet Protocol
SOF	Special Operations Forces	VPN	Virtual private network
SO/LIC	Special Operations/Low- Intensity Conflict	W3C	World Wide Web Consortium
SOW	Statement of Work	WMD	Weapons of Mass Destruction
SVGA	Super Video Graphics Array	WP	White Paper
SWAT	Special Weapons Assault Team	XML	Extensible Markup Language
TASS	Tactical Automated Security System		
TATP	triacetone triperoxide		
TIC	Toxic Industrial Chemical		
TIM	Toxic Industrial Material		
TNA	Training Needs Analysis		
TNT	Trinitrotoluene		
TOS	Tactical Operations Support (mission area/subgroup designation)		
TSA	Transportation Security Administration		
TSP-Secure	Team Software Process for Secure Software Development		
T/SSD	Tandem Specialized Search Dog		
TSWG	Technical Support Working Group		
TTD	Training Technology Development (mission area/subgroup designation)		